1/1

PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-107189

(43)Date of publication of

20.04.1999

application:

(51)Int.Cl.

D21H 17/67

C01B 33/113

(21)Application

(22)Date of filing:

09-272907

(71)

OJI PAPER CO LTD

number:

06.10.1997

Applicant: (72)Inventor:

OKADA HITOSHI

MATSUDA HITOSHI WADA MOTOHIDE

MIYAWAKI HIDEMI

(54) PRODUCTION OF COMPOSITE PARTICLE

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain composite particles high in composite rate, excellent in mechanical stability, and capable of providing, as a filler for paper manufacturing, the resultant paper in high yield with an excellent whitening degree and high opacity in white paper, and also providing it with a high opacity even after it is printed, by providing a composite form between fine particles and silicic acid hydrate under a specific condition.

SOLUTION: This method comprises the steps of: adding an alkali-resistant fine particle (calcium carbonate, titanium dioxide, etc.), to a silicic acid alkaline aqueous solution for dispersion of the particles; raising the liquid temperature up to 70 to 95°C; and adding a mineral acid (sulfuric acid, etc.), thereto while keeping the temperature in such a range so as to adjust the pH in the range of 3 to 6.5, thus obtaining the objective composite particles.